What is Claimed Is:

1. A communications system comprising:

stratospheric platform having a payload controller and a phased array antenna having a plurality of elements for generating a first beam and a second beam;

a gateway station in communication with said stratospheric platform, said gateway station receiving a first signal having a first beam having interference from the second beam therein and receiving a second signal having said second beam having interference from the first beam therein,

said gateway station comprising a first subtracting block for subtracting said second signal from said first signal to obtain the first beam;

said gateway station comprising a second subtracting block for subtracting said first signal from said second signal to obtain a second beam.

2. A communication system as recited in claim 1 wherein said gateway station weights said second signal with a first weight prior to subtracting said second signal from said first signal.

3. A communication system as recited in claim 1 wherein said gateway station weights said first signal prior with a second weight to subtracting said second signal from said first signal.

4. A communication system as recited in claim 1 wherein said first weight and said second weight are a function of said user position files.

5. A communications system as recited in claim 1, wherein the payload controller comprises a demultiplexer for receiving control signals.

6. A communications system as recited in claim 2, wherein the demultiplexer generates a plurality of element control signals.

7. A system as recited in claim 3, wherein the element control signals are coupled to an RF feed, the RF feed is coupled to elements of said phased array antenna.

8. A system as recited in claim 1, wherein the gateway station comprises a beam generator for generating beam signals.

9. A system as recited in claim 1, wherein said gateway station further comprises a multiplexer/demultiplexer.

10. A system as recited in claim 7, wherein said multiplexer/demultiplexer comprises a code division multiplexer/demultiplexer.

11. A system as recited in claim 1, wherein said ground station is coupled to a terrestrial network.

12. A system as recited in claim 9, wherein said terrestrial network comprises the Internet.

13. A system as recited in claim 9, wherein the terrestrial network comprises the public service telephone network.

14. A method of controlling a communications system having a stratospheric platform, said method comprising the steps of:

receiving a first signal having a first beam having interference from the second beam therein at a gateway station;

receiving a second signal having a second beam having interference from the first beam therein at the gateway station,

subtracting said second signal from said first signal to obtain a the first beam; and

subtracting said first signal from said second signal to obtain a second beam.

15. A method as recited in claim 14 wherein prior to the step of subtracting said second signal from the first signal having a payload controller and a phased array antenna having a plurality of elements for generating a first beam and a second beam; weighting the second signal with a first weight.

16. A method as recited in claim 15 wherein prior to the step of subtracting said first signal from the second signal a gateway station in communication with said stratospheric platform, said gateway station receiving a first signal having a first beam having interference from the second beam therein and receiving a second signal having said second beam having interference from the first beam therein,

said gateway station comprising a first subtracting block for subtracting said second signal from said first signal to obtain a the first beam;

said gateway station comprising a second subtracting block for subtracting said first signal from said second signal to obtain a second beam weighting the first signal with a second weight.

17. A method as recited in claim 16 wherein said first weight and said second weight are a function of said user position files.

18. A method of controlling a communications system having a stratospheric platform, said method comprising the steps of:

receiving a first signal having a first beam having interference from the second beam therein at a gateway station;

receiving a second signal having a second beam having interference from the first beam therein at the gateway station,

having a payload controller and a phased array antenna having a plurality of elements for generating a first beam and a second beam;

a gateway station in communication with said stratospheric platform, said gateway station receiving a first signal having a first beam having interference from the second beam therein and receiving a second signal having said second beam having interference from the first beam therein,

said gateway station comprising a first subtracting block for subtracting said second signal from said first signal to obtain a the first beam;

said gateway station comprising a second subtracting block for subtracting said first signal from said second signal to obtain a second beam.

subtracting said second signal from said first signal to obtain a the first beam; and

subtracting said first signal from said second signal to obtain a second beam.

19. A method as recited in claim 17 wherein said first weight and said second weight are a function of said user position files.